Engineers Test Wright Glider Replica In Wind Tunnel

Before they learned to fly, the Wright brothers learned to glide. A life-size reproduction of one of the aviation pioneers’ early gliders has undergone wind tunnel tests at NASA’s Langley Research Center’s Full Scale Tunnel.

During the experiment, which is being undertaken by Langley, engineers took a number of different measurements to determine how the Wright 1901 glider performed. The 22-foot wingspan aircraft was the second glider designed by Orville and Wilbur Wright as they worked to create the first human-powered flying machine.

“It’s fitting that we invest in wind tunnel tests to document the Wright’s discoveries. Orville Wright was on the advisory committee that established Langley Research Center in 1917, just fourteen years after that first historic flight at Kitty Hawk, N.C. Wright also visited Langley a number of times,” said Mike Finneran, head of Langley’s Office of External Affairs. “Our first engineers built on the Wright brothers’ early successes and helped advance aeronautics into a modern science.”

The wind tunnel tests are part of ongoing research being done by Old Dominion University (ODU) of Norfolk, Va., and The Wright Experience of Warrenton, Va. The Discovery of Flight Foundation, a non-profit organization also in Warrenton, has contracted with The Wright Experience to uncover and document how the Wright brothers, neither of whom finished high school, managed to conquer the principles of flight in five short years.

None of the Wrights’ first prototype aircraft were saved, nor were their early construction documents and drawings. To try to retrace the brothers’ groundbreaking steps to flight, Wright Experience founder Ken Hyde and his team are researching, reconstructing, testing, analyzing and documenting authentic full-scale reproductions of many of the Wright brothers’ aircraft and engines.

“The 1901 glider was an important step in the Wrights’ development of the Flyer, not because it was successful, but because it wasn’t. The 1901 glider was extremely difficult to control and it didn’t demonstrate flight-handling characteristics consistent with theories used by the Wright brothers,” said Professor Robert Ash, Wright tunnel-test program manager for ODU. “So Wilbur and Orville decided they needed a different approach. They built a small-scale wind tunnel to evaluate nearly 200 airfoil and wing models. They started the world’s first successful wind tunnel-based aircraft design program, a precursor to the systems engineering approach used by the aviation industry today.”

The Wright Experience and ODU have already built and tested a number of reproductions of Wright propellers in their quest to “reverse engineer” the 1903 Wright Flyer and other early Wright aircraft. The reproduction of the Flyer is under construction at The Wright Experience workshop.

More information on the Wright Experience is available at: http://www.wrightexperience.com

More information on the centennial, the history and future of powered flight, and events planned to celebrate the upcoming anniversary is available at: http://www.centennialofflight.gov

Leonids May Provide Spectacular Show

Delmarva residents should be able to view a spectacular night light show in mid-November as the annual Leonid meteor shower occurs.

The Leonids are expected to appear Nov. 14 - 21 with the peak expected on the morning of Nov. 18. You can start looking shortly after midnight, but the peak is expected to occur between 4 and 5:30 a.m. with 5 a.m. being the optimum time for viewing on Nov. 18.

Where to look: Look to the east for the constellation Leo in the area called the sickle or backwards question mark. For the non-astronomers, look to the east at 50 to 70 degrees above the horizon between 4 and 5:30 a.m.
CFC Fun Day 2001

Caroline Massey

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Sandra Banks, Claudia Folk, Linda Layton, JoAnn Marden

Chris Shreves with the winning entry, Rain Maker

Deanna and Chris Shreves

Tasting samples at the chili cook-off.

Lisa Bass, Sherry Kleckner, Tina Wessells

Dorine Trent

Volleyball play-offs.

Theo Bugtong and Phil Eberspeaker

Craig Purdy

Delores Jester

Julie Bloxom readies the Navy entry, Noble Eagle.

Todd Thorne, Bobby Flowers, Dave Krause

Keith Koehler gets Soaring Eagle ready for launch.

Kim Ferry

Sue Semancik, Dwayne Turley and Donna Smith with second place entry, Soaring Eagle.

Pat Pruitt

CFC Fun Day 2001